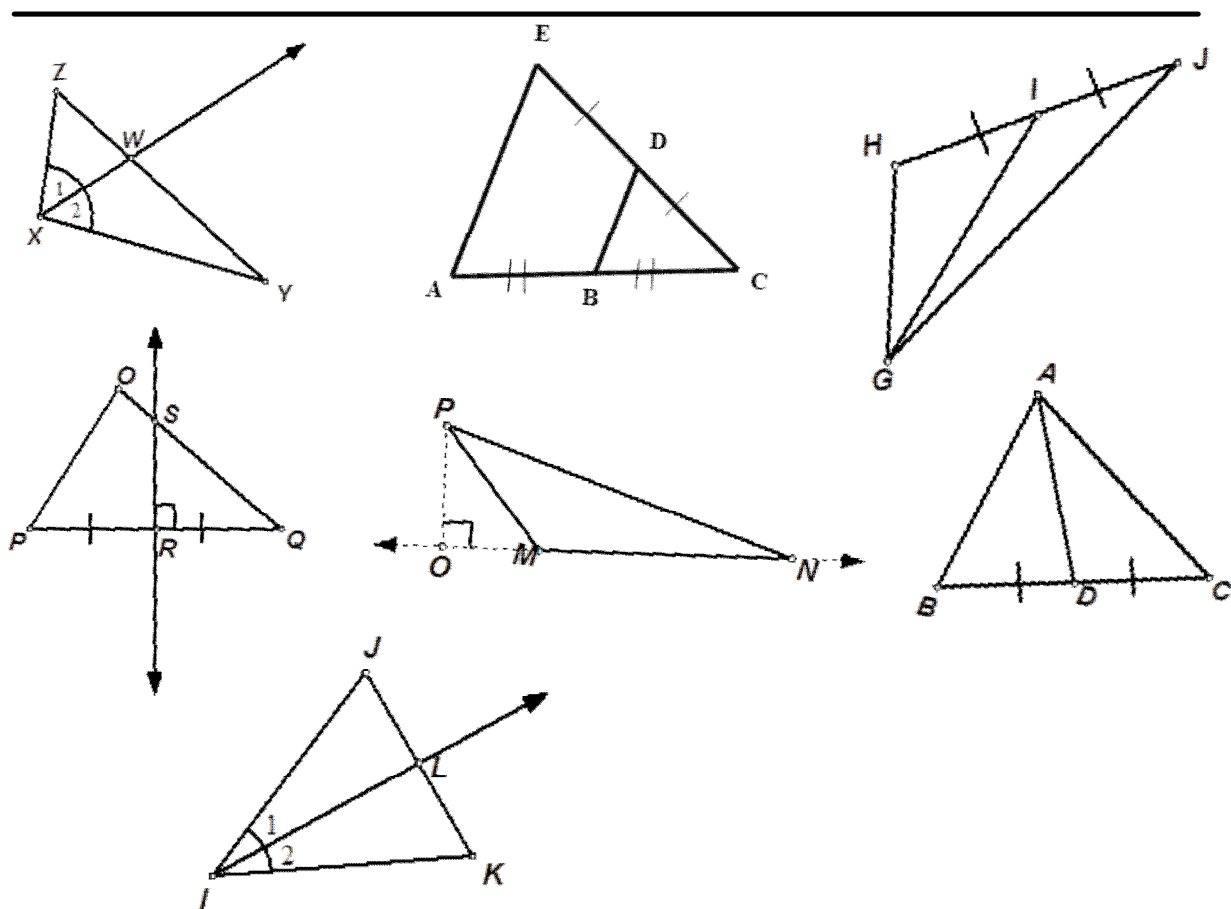


12/02/13 Agenda

- Warm Up
- Review Worksheet 7 - Triangle Inequality
- Review Worksheet - Sections 5.1 - 5.4
- Tomorrow - Review Packet
- Wednesday (12/4) - Target Review Day
- Thursday 12/05 - Unit 5 Test
- NGA on Friday

Homework Out!



5.1 - Mid-Segments of a Triangle.

Target 5A

- Connects midpoints of 2 sides
 - Half the length of 3rd side
 - Parallel to 3rd side
-

5.2 - Perpendicular Bisectors of a Triangle.

Target 5B

- Perpendicular to side
 - Bisects side ($2 \cong$ segments)
 - Equidistant from vertices
 - Concurrent at Circumcenter (equidistant from vertices)
-

5.3 - Angle Bisectors of a Triangle.

Target 5C

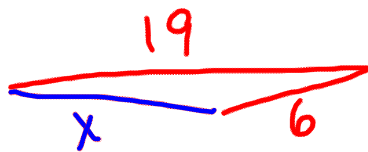
- Bisects angle ($2 \cong$ angles)
 - All points on bisector equidistant from sides of the angle
 - Concurrent at Incenter (equidistant from sides)
 - Splits opposite side in proportion to 2 sides forming angle
-

5.4 - Altitudes & Medians of a Triangle.

Targets 5D & 5E

- Medians
 - Connects vertex to midpoint of opposite side
 - Splits opposite side into $2 \cong$ segments
 - Concurrent at Centroid (balance point of triangle)
 - Centroid splits Median into 2 proportional segments
 - Vertex to Centroid = $\frac{2}{3}$ Median
 - Centroid to Side = $\frac{1}{3}$ Median
 - Altitudes
 - Perpendicular segment between vertex & opposite side
 - "Height" of the triangle
 - Concurrent at Orthocenter
-

9. 6 and 19



$$\begin{array}{r} x+6 > 19 \\ -6 \quad -6 \\ \hline x > 13 \end{array}$$

AND



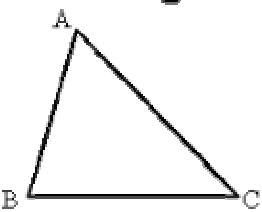
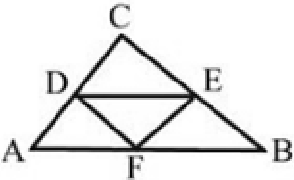
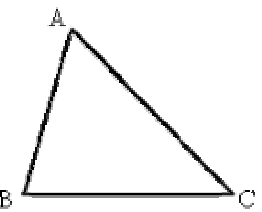
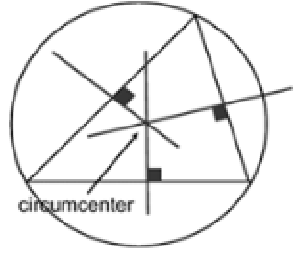
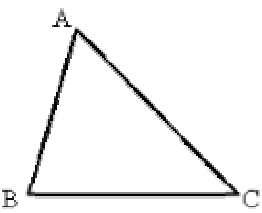
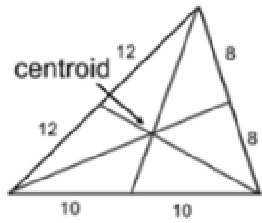
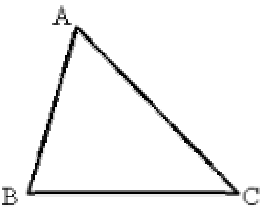
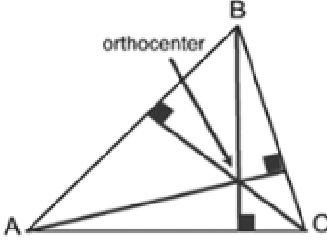
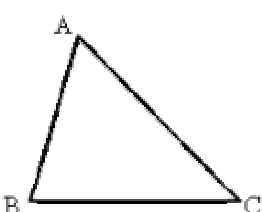
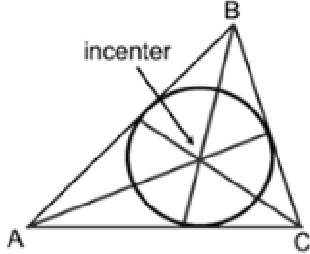
$$19+6 > x$$

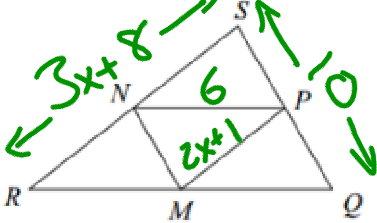
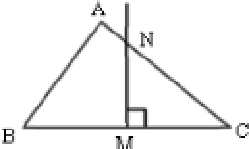
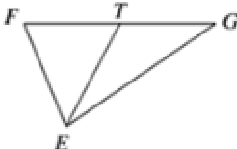
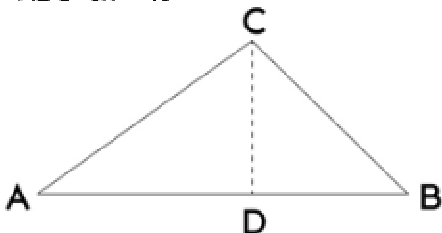
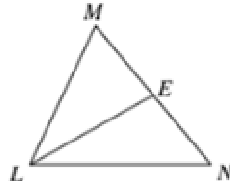
$$25 > x$$

$$13 < x < 25$$

Triangle Segments and Centers Review

Name: _____

Draw One and Mark the Picture	Definition	Special Properties	Draw All 3 Name the Center
Midsegment 	CONNECTS MIDPOINTS OF 2 SIDES	TO 3RD SIDE $\frac{1}{2}$ LENGTH 3RD SIDE	
Perpendicular Bisector 			
Median 			
Altitude 			
Angle Bisector 			

MARK THE PICTURE	SOLVE AN EQUATION	FIND THESE ANSWERS
<p>NP, MP, and NM are Midsegments: $SQ = 10$, $NP = 6$, $MP = 2x+1$, $RS = 3x + 8$</p> 	<p> $RS = 2(MP)$ $3x+8 = 2(2x+1)$ $3x+8 = 4x+2$ $\underline{-3x} \quad \underline{-3x}$ $8 = x+2$ $\underline{-2} \quad \underline{-2}$ $6 = x$ </p>	<p> $NM = 5$ $RQ = 12$ $x = 6$ $MP = 13$ $RS = 26$ </p>
<p>MN is a Perpendicular Bisector: $NMB = 6x+12$, $BM=16$, $MC=3y+4$</p> 		<p> $x =$ $y =$ $BC =$ </p>
<p>TE is a Median: $FT=5x+4$, $TG=3x+10$</p> 		<p> $x =$ $FT =$ $TG =$ $FG =$ </p>
<p>CD is an Altitude: $ADC=5x - 10$</p> 		<p> $x =$ $CDB =$ </p>
<p>LE is an Angle Bisector: $MLN=100$, $NLE=2x - 6$</p> 		<p> $x =$ $NLE =$ $MLE =$ </p>